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ABSTRACT

A study investigated whether basal reading instruction combined with whole language development instruction would help a group of sixth graders improve in reading skills as measured by the Metropolitan Reading Test. Subjects, 82 students from a metropolitan area in the Southwest, were given pretests and posttests which measured performance in word recognition and comprehension. Results indicated that word recognition was increased and comprehension growth was affected when language development was included in the reading program. The groups receiving language development showed higher gains in word recognition and comprehension. Findings also indicated that gender and ethnic background were not contributing variables. Findings suggest that the language development approach was effective in improving reading achievement. (Six tables of data and more than eight pages of references are attached.) (ARH)

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IMPROVED READING ACHIEVEMENT OF SIXTH GRADE STUDENTS WHEN USING A WHOLE LANGUAGE APPROACH IN CONJUNCTION WITH A BASAL READING PROGRAM

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ABSTRACT

The purpose of this study was to investigate whether basal reading instruction combined with whole language development instruction would help classes of certain sixth-grade children achieve gains in reading as measured by the Metropolitan Reading Test.

The sample consisted of 82 sixth grade students attending a K-6 elementary school in a southwestern metropolitan area during the fall semester of 1985. Performance in word recognition and comprehension was measured pretest, posttest by the Metropolitan Reading Test.

Findings of the study indicated that word recognition was increased when language development was included in the reading program. The significance level was .05.

Additional findings indicated that gender and ethnic background were not contributing variables. The adjusted means showed higher gains in word recognition and comprehension for groups receiving language development.

The findings of this study indicated that language development increased word recognition skills and was affecting the comprehension growth of all students receiving the treatment regardless of ethnic background or gender. Based on these findings, the language development approach was effective in improving reading achievement.

IMPROVED READING ACHIEVEMENT OF SIXTH GRADE STUDENTS WHEN USING A WHOLE LANGUAGE APPROACH IN CONJUNCTION WITH A BASAL READING PROGRAM

This study was justified for three specific reasons: (a) a review of the literature indicated that language development is an integral factor in reading achievement; (b) further search of the literature provided positive results when natural environment and language patterns were utilized in the classroom setting; and (c) limited research was found that provided results for integrating whole language reading and basal reading programs.

A review of the literature and related research revealed an awareness of the relationship of language development and reading achievement (Dawson, 1950; Downing, 1969; Gibbons, 1941; Goodman, 1974, 1982, 1985; Hart, 1975; Hughes, 1950; Loban, 1976), and that rich and relevant language development provides a foundation for the real purpose of reading and removes the abstract quality of reading (Downing, 1969, 1970, 1982; Johnson, 1982; Piaget, 1959; Reid, 1966; Vernon, 1957; Vygotsky, 1962). Authorities further found that children do possess language facility, and that language proficiency may be the best single indicator of reading success (Dawson, 1950; Downing, 1982; Goodman, 1974; Hughes, 1950; Zintz, 1975).

A knowledge of vocabulary and an understanding of sentence structure were found to be basic to reading achievement (Durkin, 1970; Dykstra, 1968; Hildreth, 1948, Ruddell, 1967; Seegers, 1944), and that language development activities provided growth in vocabulary and sentence sense (Durkin, 1970; Dykstra, 1968; Hughes, 1950).

Limited research was discovered concerning basal reading programs. Available research explained the format of the typical basal lesson (Wood, 1984) and the Socratic method of instruction (Durkin, 1972; Goodman, 1975, 1979, 1985; Goodman & Goodman, 1979; Manning, 1985). Sequencing and emphasis on skills instruction were questioned (Bromwich, 1971; Goodman, 1974; Singer, McNeil & Furse, 1984; Wood, 1984).

Neglect of natural environment and language patterns resulting in an abstract quality in the act of reading was evidenced in the research (Artley, 1953; Gibbons, 1941; Irwin & Marks, 1984; Shire, 1945), and that children learn to read in the same manner they learned to speak (Goodman & Goodman, 1979; Halliday, 1973; Jaggar and Burke, 1985; Smith, 1977). Classroom environment needs to include the natural environment and language patterns of the students (Alvermann, 1984; Chafel, 1982; Fox, 1976; Goodman, 1985; Nezworski, Stein, & Trabasso, 1982; Nurss, 1980; Paris, Lipson, & Wixson, 1983; Stein, 1982).

Correlation of the language development approach and basal reading program were advocated in various studies as a result of positive reading achievement being experienced when language development activities were added to the lesson (Alvermann, 1984; Bull & Wittrock, 1973; Carroll, 1966; Cazden, 1972; Cohen, 1968; Crafton, 1981; Graves & Cook, 1981; Hilliard & Troxell, 1937; Langer & Nicholich, 1980; Linden & Wittrock, 1981; Pearson, Hansen & Gordon, 1979; Rumelhart, 1977; Stauffer, 1970; Thorn, 1972; Vail, 1980; Wittrock & Carter, 1975).

Method and Findings

Two questions were considered in this study:

1. When pretest scores are considered as covariates, will there be a statistically significant difference in the posttest mean scores in the reading achievement areas of word recognition and comprehension between the experimental group receiving language development instruction along with basal instruction and the control group receiving only basal instruction?

2. What combination, if any, of the following variables will predict improved reading achievement in the areas of word recognition and comprehension: treatment, gender, and ethnic background?

Question 1 was tested with data delineated from an analysis of covariance. The critical value for each was the .05 level of significance. The analyses are presented as follows:

Differences in Reading Achievement When Treatment Varies

Question 1 of this study asked whether a significant difference would appear in word recognition and comprehension if a language development approach was used in conjunction with the basal reading program. An analysis of covariance was employed as the statistical treatment of the pretests and posttests.

Table 1 displays the adjusted means and derived F ratios for the treatment areas of reading word recognition and comprehension for the experimental and control groups. There was no significant difference between the intact groups.

Question 2 in this study was concerned with the interaction of selected variables that would predict improved reading

achievement in the areas of word recognition and comprehension. The predictor variables were the treatment, gender, and ethnic background. Scores used in this instance were the word recognition and comprehension scores measured by the Metropolitan Achievement Reading Test.

Factoral analysis of covariance was employed to test the effects of gender, ethnic background, and treatment as set forth in Question 2. Table 2 shows differences in word recognition scores when interaction with ethnic background and gender were considered. In this analysis, a significant difference appeared at the .05 level for the treatment variable. Table 3 shows the differences in comprehension scores when interaction with ethnic background and gender were considered. In this analysis, no significant difference was found in the area of comprehension. Table 4 displays the adjusted means and F ratio for the treatment areas of reading word recognition and comprehension. The adjusted means indicated higher average scores for the treatment group. Table 5 shows the adjusted means and F ratio for the treatment area of word recognition when the variables of ethnic background and gender are considered as shown by factoral analysis of covariance. There was no significant difference when considering the variables of ethnic background and gender with the treatment. Table 6 displays the adjusted means and F ratio for the treatment area of comprehension when the variables of ethnic background and gender are considered. No significant difference existed when considering ethnic background and gender with the treatment.

Differences in treatment groups emerged only when variance associated with gender and ethnic background was statistically controlled in the factorial analysis. In effect, though the variables of ethnic background and gender were not independently significant, they were associated with enough variance in the initial residual component to make a difference in the F ratio associated with the treatment; that is, when the variance associated with ethnic groups and gender were removed, the residual was relevant enough to make the F ratio significant at the .05 level.

Other combinations included a two-way interaction of treatment x ethnic background, treatment x gender, and ethnic background x gender; and a three-way interaction of treatment x ethnic background x gender. None of these was significant at the

Additional findings indicated that gender and ethnic background were not contributing variables. The adjusted means showed higher gains in word recognition and comprehension for groups receiving language development.

The findings of this study indicated that language development increased word recognition skills and was affecting the comprehension growth of all students receiving the treatment regardless of ethnic background or gender. Based on these findings, the language development approach was effective in improving reading achievement.

Table 1

Adjusted Means for Reading Achievement in the Treatment Areas of Word Recognition and Comprehension as Shown by Analysis of Covariance

Treatment Area	df	Adjusted Means		F
		Experimental	Control	
Word Recognition	1.79	662.71	580.04	3.80
Comprehension	1.79	698.95	625.92	2.80

Table 2

Differences in the Reading Achievement Area of Word Recognition When Interaction of Gender and Ethnic Background Are Considered

Source of Variation	df	MS	F
Covariate-Pretest	1	104.14	.003
Main Effects	3	76362.875	1.992
Treatment	1	165138.725	4.308*
Ethnic Background	1	56797.889	1.482
Gender	1	57725.258	1.506
Two-way interaction	3	20379.552	.532
Treatment x Ethnic Background	1	5404.443	.141
Treatment x Gender	1	15623.860	.408
Ethnic Background x Gender	1	53384.559	1.393
Three-way interaction	1	61873.000	1.614
Treatment x Ethnic Background x Gender	1	61872.997	1.614
Residual	73	38336.903	
Total	81	33898.745	

*$p < .05$

Table 3

Differences in the Reading Achievement Area of Comprehension When Interaction of Gender and Ethnic Background Are Considered

Source of Variation	df	MS	F
Covariate-Pretest	1	60.522	.002
Main Effects	3	59730.510	1.538
Treatment	1	126155.663	3.249
Ethnic Background	1	41001.527	1.056
Gender	1	49667.797	1.279
Two-way interaction	3	33351.806	.859
Treatment x Ethnic Background	1	122235.980	.315
Treatment x Gender	1	21106.708	.544
Ethnic Background x Gender	1	86750.825	2.234
Three-way interaction	1	97250.871	2.505
Treatment x Ethnic Background x Gender	1	97250.870	2.505
Residual	73	38828.00	
Total	81	39642.004	

Table 4

Adjusted Means for Treatment Areas of Reading Word Recognition and Comprehension

		Adjusted Means		
Treatment Area	df	Experimental	Control	F
Word Recognition	1.79	668.74	576.06	4.51
Comprehension	1.79	703.93	614.76	3.2

Table 5

Adjusted Means for Treatment Area of Word Recognition When the Variables of Ethnic Background and Gender are Considered

		Adjusted Means		
Variable	df	Group I	Group II	F
Race	1.79	692.04	623.04	1.4
Gender	1.79	615.22	669.75	1.5

Table 6

Adjusted Means for the Treatment Area of Comprehension When the Variables of Ethnic Background and Gender are Considered

		Adjusted Means		
Variable	df	Group I	Group II	F
Race	1.79	722.90	666.21	1.0
Gender	1.79	655.94	716.47	1.3

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